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## RELATION OF THE GOVERNMENT IN GERMANY TO THE PROMOTION OF COMMERCE<sup>1</sup>

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Prior to the unification of the Empire in 1871, Germany represented an agricultural nation with few manufactures, with scarcely any merchant marine and with comparatively little foreign trade. Nearly two-thirds of the population was rural. Her industrial capital was small and business in general was conducted with extreme care and caution. Within the short space of a few decades, however, the situation has been strikingly reversed, and her interests, instead of being mainly agricultural, have become overwhelmingly those of a manufacturing and commercial nation. Her population, already equal to over 650 for every thousand acres of food-producing land, still shows the surprising increase of eight per cent. during the half decade from 1895 to 1900. No less than fifty-seven per cent. of her fifty-six million people in 1900 were engaged in industry and commerce as distinguished from agricultural pursuits; while during the generation from 1871 to 1900 her urban population increased fifteen and three-fourths millions as opposed to an increase of only fifteen and one-third millions for the entire country. In other words, Germany has reached an economic position which is essentially that of the United Kingdom, of a country no longer self-contained, but whose industries depend to an increasing degree upon raw materials from abroad and one-third of whose population is fed with foreign food. To protect herself against the vicissitudes of the future, Germany must necessarily become more and more an exporting and maritime nation.

Such being the problem which demands solution, it is easy to understand why the several governments, State and Imperial, have utilized every means at their disposal to stimulate trade and navigation. Indeed, government aid in Germany has been extended so as to embrace every phase of commercial activity. In the first

<sup>1</sup>Among the chief authorities relied upon in this sketch are the British Diplomatic and Consular Reports; The American Consular Reports; the Reports of the Commissioner of Navigation from 1899 to 1903; "Hamburg's Handel und Schifffahrt;" Lotz's "Verkehrsentwicklung in Deutschland 1800-1900;" H. R. Meyer's series of articles on German canals and railways in the *Railway Age* for 1903; and Alfred von Weber-Ebenhoff's articles "Waterways in Europe" in the *International Quarterly* for 1904. Special mention must be made of Dr. Wiedenfeld's "Die nordwesteuropäischen Welthäfen." Information has been freely drawn from this work. It proved to be extremely valuable on account of its general and exhaustive treatment of the subject.

place, German manufacturers enjoy a foreign market which has been vastly enlarged since 1891 through favorable treaty arrangements. Large sums are expended annually in fostering industrial and commercial education to an extent seldom met with in other countries and with results which have called forth warning notes from British and American Consuls in all parts of the world. The shipbuilding industry is favored not only with preferential railway rates and an exemption from the payment of customs duties on shipbuilding material, but also with a monopoly in the construction of national war vessels and subsidized mail steamers. Furthermore, the Imperial Government has embarked upon a policy of subsidizing the merchant marine. Over 7,000,000 marks are paid annually in the form of mail subsidies to those lines which are engaged in the Asiatic, Pacific and African service. While this sum is paid, nominally, for carrying the mails, there can be no doubt that an equally important reason is the desire to strengthen the navy, to free German commerce from the agency of foreign nations and to extend German trade and influence to those parts of the earth where her position is weakest and where private initiative, if left to itself, might prove inadequate.

All these methods of assisting commerce, however, constitute only a part, and perhaps the smallest part, of the general system of government aid. In her search for a short cut to commercial power, Germany, like all the great nations, has emphasized the importance of cheap and easy transportation in the winning of distant markets. Neither money nor labor has been spared in an endeavor to facilitate transportation to the innermost parts of the empire and to unite the highly ramified system of artificial and natural waterways of the interior with the larger commercial life of the ocean. It is to a discussion of this last phase of German commerce that the present paper is principally directed. In this connection it will be attempted to state briefly the essential facts with reference, first, to the control and improvement of the harbors; and, secondly, to the relation which exists between these harbors and the interior through the network of rivers, canals and railways.

### *I. The Management of Harbors.*

Although the Imperial Government of Germany exercises a large measure of control over the merchant marine and over naviga-

tion on interstate waterways, it possesses, broadly speaking, no authority to construct or manage harbors, this function being intrusted solely to the care of the several States.

In Hamburg and Bremen the harbors are operated as State property, the work of construction being placed in the hands of a special department for this purpose and the general supervision and care of the harbor being exercised in Hamburg by a Department of Trade and Commerce and in Bremen by a Department for Harbors and Railways. Over both these departments stands the Senate of the State, which exercises the ultimate executive power. All expenditures for purposes of construction and operation are borne by the two city-republics themselves, and are defrayed from general taxation. The receipts, on the other hand, are merged with the general income of the State, there being no necessary connection between the expenditures for harbors and the receipts derived therefrom.

In the case of both these world-ports, the State either owns or controls the larger portion of the warehouse system. Bremen, for example, in return for a stipulated percentage of the net earnings, furnishes the ground and constructs the buildings, but does not interfere with the management or business activity of the system, except as regards the regulation of the warehouse dues. Hamburg, on the other hand, does not in the main assume the duty of constructing the buildings, but merely leases the ground for a certain percentage of the net earnings to a Free Harbor Warehouse Association. This association, while obliged to construct all necessary buildings and bear all financial losses, is, nevertheless, subject to a large measure of State control. To the Senate belongs the right of regulating the warehouse dues and of determining the nature of the buildings to be constructed. Likewise all acts which involve an increase in the capital stock or indebtedness of the association, or a change in its rules must be sanctioned by the Senate. Finally, the State is represented in the directorate of the association and possesses the power to suspend any act of that body until the Senate may have passed on its expediency.

What has been said concerning Hamburg and Bremen holds in a general way for the other German harbors. As a rule, their construction and management is intrusted to the care of local boards or commissions subject to the general supervision of the State:

in Luebeck to a Board of Public Works and the police authority, in Rostock to a Board of Public Works, and in Wismar to a Harbor Department. In Prussia the management and improvement of harbors is conducted either under the supervision of the Board of Public Works for each respective city or by permanent commissions, which are local in character, but which must receive the sanction of the State as regards harbor improvements and other important changes. To be specific, all harbor matters in Stettin are managed by a Board of Public Works; in Kiel, by a Harbor Commission; in Flensburg by a Harbor and Bridge Commission; in Swinemuende, by a Royal Commission of Navigation officiating as a local authority; and in Koenigsberg by a Royal Harbor Police Commission. The operating expenses, as a rule, are borne by the local communities and are defrayed from the harbor receipts.

## *II. Improvement of Harbor Channels.*

During the last twenty-five years nearly all the leading sea-ports of Northwest Europe have exerted themselves to the utmost in an endeavor to adapt their facilities to the growing conditions of international trade. Indeed, practically all the leading ports, with the exception of London, have remained close rivals in this respect during the whole of this period. This strenuous competition may be attributed, first, to the rapidly increasing size and draught of ocean steamers, and, secondly, to the struggle between these ports for the Eastern trade and the consequent desire to accommodate ships of the Suez standard. The less anyone of these harbors is dependent upon the influence of tide, the greater is the advantage of that port. Hence any effort on the part of one harbor to deepen its channel or to improve its facilities for landing, loading and unloading, has resulted in a corresponding effort on the part of the other ports.

As regards the channel leading from the sea to the landing place, the German-Dutch-Belgian ports cannot be said to have been favored by nature. Whatever position these harbors now hold has been the result of vast labor and expenditure and the improvements have by no means been completed. Hamburg, until about 1850, possessed a channel measuring only from 4.0 to 4.3 meters in depth at high tide. At an enormous expenditure this depth has been increased to 8.3 meters, while arrangements have been

made for a further increase of 1.7 meters. Bremen has also labored under unusual difficulties since its original channel measured only 2.5 meters in depth. After an outlay of some 50,000,000 marks, however, this city has secured a channel which can accommodate ocean-going vessels with a draught of 6 meters.

The three Dutch-Belgian ports have each abandoned their original channel during the nineteenth century, and with the help of the State have constructed for themselves an entirely new opening to the sea. Amsterdam has received fully 37,000,000 marks from the State during the last thirty years for the improvement of the North Sea Canal and has increased its depth to 9 meters, so that all ships, except the very largest, can obtain an easy access to the port. Rotterdam, assisted liberally by the National Government, has secured the construction of a new channel at a cost of approximately 61,700,000 marks. For Antwerp the State has also expended large sums toward deepening and straightening the channel, and, according to plans now being arranged, it is intended to increase the present depth of 6 meters at low tide and 10.4 meters at high tide to 8 and 12.4 meters, respectively. In the case of every one of these ports large sums have thus been expended to secure a suitable waterway. With the exception of Bremen, each port has also plans arranged for or under prosecution, which, when completed, will enable it to receive vessels with a draught at least equal to the Suez standard.

### *III. Improvement of Harbor Facilities.*

The rivalry between the leading ports of Europe concerning the improvement of their channels also exists in the provision of basins, wharves, warehouses and other necessary equipment. Enormous sums have been paid by most of the ports in rendering easier and swifter the process of loading and unloading. Particularly is this true of Hamburg, nearly all of whose harbor facilities have been constructed during the last twenty years. Even as late as 1866 all sea-going vessels were obliged to anchor in the open stream, and the whole process of loading and unloading had to be conducted by means of lighters. About that time, however, Hamburg began the construction of a series of improvements with the result that to-day her system of docks and piers is reputed to be the best in existence and her ship lines, according to Dr. Wiedenfeld, enjoy an

ease of communication with the shore far superior to that furnished by the English ports.

Besides possessing probably the best system of warehouses in the world, Hamburg has made admirable connection with the railways and interior waterways. Separate harbor basins have been constructed for the numerous canal and river boats where they may remain to await the arrival of steamers. The steamer basins have been constructed with a view to making a swift transfer of freight to and from vessels the prime consideration, any gain in this respect meaning of course a corresponding gain in the length of available piers. The wharves, besides being exceedingly spacious and built of durable material, are amply supplied with hydraulic machinery. At the present time the basins cover an area of 336.4 acres, while the total length of quays approximates 8.5 miles. Extensions are now being made, however, which will increase the area of the basins to 612.56 acres and the length of the quays to 12 miles. When this project is completed Hamburg will have spent some 180,000,000 marks since 1880 for its harbor facilities—of which sum the Imperial Government contributed 40,000,000 marks at the time of Hamburg's accession to the Customs Union—and this enormous outlay does not include the large sums expended in deepening and otherwise improving the channel, or in constructing the excellent system of warehouses. It only requires the further deepening of the channel, for which arrangements have already been made, and the completion of the extensions referred to above, to make Hamburg's harbor satisfy the highest requirements of modern efficiency.

What has been said of Hamburg is true of Bremen and the Dutch-Belgian ports, though on a smaller scale. In the provision of appliances for loading and unloading freight these harbors are practically on a par, and meet the latest requirements. In all, too, the construction of the harbor was so arranged that the new warehouses would be situated at once near the water and in the immediate vicinity of the large mercantile offices.

Limiting our discussion to the sums expended, it appears that subsequent to 1885 Bremen has paid in round numbers 93,800,000 marks for its harbor facilities, exclusive of the 50,000,000 marks devoted to the deepening of the channel. Of this sum the Imperial Government contributed 12,000,000 marks when Bremen

joined the Customs Union in 1888 and 1,800,000 marks towards the construction of the Kaiserdock at Bremerhafen. Exclusive of the expenditures for the improvement of the channel, Amsterdam has spent 42,500,000 marks for its harbor facilities; Rotterdam about 30,000,000 marks; while Antwerp since 1879 has paid approximately 130,000,000 francs, of which sum the State contributed considerable more than one-half. Large sums have also been expended in Stettin, Danzig, Kiel, Emden and other smaller ports on the North Sea. Stettin after an outlay of some 40,000,000 marks has secured a harbor which is not only beginning to share in the American trade, but which at the expense of Copenhagen and Gothenburg, is rapidly acquiring more and more of the Russian and Scandinavian trade. Altogether, it has been estimated that the several governments of Germany have devoted about \$125,000,000 since 1888 towards the improvement of harbors, and that of this sum about six-tenths has been used for the channel and other facilities of Hamburg alone. This single port, it has been said, "has spent more money than any other two harbors in the world together during the last score of years to perfect its technical facilities."<sup>2</sup>

#### IV. Commercial Growth of Harbors.

Along with the large expenditures for harbor improvements there has followed an increased power to handle traffic and a tremendous growth in the importance of these harbors from the standpoint of international trade. This becomes especially clear if one compares the net registered tonnage of vessels entering and leaving the various ports. Thus the total net registered tonnage of vessels engaged in foreign trade has been compiled as follows for the eight leading harbors of Northern Europe:

TOTAL FOREIGN TRADE IN THE YEAR.*				
	1000 Net Registered Tons.			
	1870	1880	1890	1900
London .....	7,116	10,577	13,481	16,701
Liverpool.....	6,773	9,659	10,941	11,668
Hamburg.....	3,200	5,529	10,417	16,088
Bremen .....	1,325	2,345	3,482	5,032
Antwerp.....	2,282	5,982	9,022	13,366
Rotterdam.....	2,096	3,368	5,754	11,733
Amsterdam .....	714	1,463	2,068	2,972
Havre.....	2,321	3,912	4,419	4,406

A glance at the above table will show that the tonnage of Ham-

\*Wolf von Schierbrand: "Germany: The Welding of a World Power," p. 201.

\*Wiedenfeld's "Die nordwesteuropaischen Welthaeften," p. 361.



burg in 1900 (16,088,000) is but slightly less than the tonnage of London (16,701,000); while Antwerp and Rotterdam each has a tonnage which about equals that of Liverpool. It appears, furthermore, that the tonnage of the three ports of Hamburg, Rotterdam and Antwerp has increased during the last thirty years by 443 per cent. as opposed to an increase of only 135 per cent. for London, only 72 per cent. for Liverpool, and 90 per cent. for Havre. Indeed, during the single decade from 1890 to 1900 the total net registered tonnage for the first three cities increased over 63 per cent., whereas for London, Liverpool and Havre the increase but slightly exceeded 13 per cent. For the year 1902 the total imports and exports of Hamburg were approximately \$1,707,664,000 and for Antwerp \$660,060,000, as opposed to \$528,741,000 for Bremen, \$1,260,290,000 for London and \$1,138,700,000 for Liverpool. It is interesting also to note that the combined trade in tons of the four ports of Koenigsberg, Danzig, Luebeck and Stettin has increased by approximately 50 per cent. during the decade from 1890 to 1900, or at a rate not very much below that of Hamburg and Bremen.

#### *V. Construction of Canals and Canalization of Rivers.*

The extraordinary growth which we have just noted in the sea navigation of Hamburg, Bremen and the Dutch-Belgian ports can only be explained by their good connection with the German interior. It is the relation to a large and productive interior, more than any other factor, which determines the international importance of harbors, and Hamburg, be it said in this connection, is more favorably situated than any other city of the Old World. Its influence extends not only over most of Germany and Austro-Hungary, but, as regards certain commodities, even into Russia and Switzerland. Besides being the terminal of seven systems of railways, this port receives the traffic drained by an extensive network of inland waterways which carries its influence into central Europe. The Elbe and Moldau rivers, navigable for a distance of 582 miles, secure for Hamburg the trade of the region around the important centers of Magdeburg, Dresden and Prague. The Saale, Havel and Spree rivers drain the commerce of Thuringia and Berlin; while the Oder-Spree and the Finow canals make tributary to this port a large portion of the trade from Silesia, the whole Upper, Middle and Lower Oder, as well as the Warthe. In

large measure this extensive system of waterways is navigable for ships of 400 tons, and, in the main, does not require the payment of tolls.

Bremen, as contrasted with Hamburg, is at a disadvantage when we consider inland navigation, its influence being confined chiefly to the relatively unimportant Weser. The Dutch-Belgian ports, however, derive traffic from the rivers and canals of nearly the whole of Northwest Europe. Besides controlling the trade of the numerous waterways of Holland and Belgium, they share in common the commerce of the Rhine. This river is navigable as far as Mannheim (a distance of 560 km.) for ships of 1500 tons, and to Strassburg (700 km.) for ships of 800 tons. Through its principal tributaries—the Meuse, the Mosel and the Main—it also draws to these ports much of the trade drained by the numerous canals of France and Western Germany. The Meuse, for example, has been rendered navigable through canalization for ships of 300 tons for a distance of 600 kilometers. Through canals this river has also been connected with the Rhine, the Seine and the Saône-Rhone, thus making tributary, especially to Rotterdam, much of the trade from all of Northern and Eastern France. The Mosel, navigable to Nancy for 200 ton ships, is likewise united with the system of French canals. The Main has been canalized so as to be navigable for ships of 1500 tons as far as Frankfort, for 120 ton ships as far as Bamberg, and from there has been connected with the Danube through the Ludwig canal. Proceeding still further up the Rhine, we find that Strassburg has been united with the whole of Alsace and with the Saône and Rhone by means of canals which can accommodate ships of at least 200 tons.

This extended account of existing waterways is given with a view of showing the extent to which the State has assisted commerce by constructing canals and canalizing rivers. The importance of such aid cannot well be overemphasized. Transportation by water has decided advantages over transportation by rail insofar that cheap and bulky commodities can be carried much more cheaply over long distances, and, secondly, because tolls on those artificial waterways of Germany which belong to the State are levied strictly in accordance with the cost of maintenance and replacement.

These two advantages of water transportation—cheap con-

veyance for bulky commodities and a tariff policy varying with the cost of maintenance—are of fundamental importance in Germany where the railways constitute a State monopoly used largely as a revenue producing agency of the government, and where the leading manufacturing centers and the principal sources of fuel and raw material are situated remotely from the coast. This becomes especially apparent when it is remembered that the receipts per ton-mile concerning the traffic on the rivers in Germany varies between 0.176 ct. and 0.519 ct., and upon the canals from 0.346 ct. to 0.692 ct.,<sup>4</sup> whereas for the railways the average earning per ton-mile in 1899 was about 1.42 cents. Roughly speaking, therefore, the rates on the rivers and canals may be said to be about one-third as high as those charged on the railways. Moreover, there is the important consideration that subsequent to 1875 the average receipts per ton-mile on the waterways decreased about 50 per cent. as opposed to a decrease of only 15 per cent. on the railways.<sup>5</sup>

Along with these low and declining freight rates has gone a marvelous increase in traffic. During the twenty years from 1877 to 1897 the number of canal and river boats increased 28 per cent.; the carrying capacity of these boats, however, increased during the same period to 3,400,000 tons or 143 per cent.; while the actual traffic increased 159 per cent. Practically all the recent canal projects of the country have in view the accommodation of 600 ton ships west of the Oder and 400 tons ships east of that river. In 1900 the canals and rivers carried approximately 24 per cent. of the total traffic of the country, the average haul being 320 kilometers or twice that on the railways.

It is from the standpoint of the import and export trade of the leading ports, however, that the importance of interior waterways has shown itself most prominently. By weight about one-half of the export trade to the Dutch ports from the region along the Rhine and about three-fourths of the import trade moves by river. Indeed, during the decade ending in 1900 the trade of Rotterdam by way of the Rhine has nearly trebled and at present exceeds the railway traffic of the city by almost two times. Likewise, of the extensive trade between Hamburg and the region tributary

<sup>4</sup>H. R. Meyer: *Railway Age*, July 17, 1903. pp. 62.

<sup>5</sup>*Ibid.*

to the Elbe and Oder rivers and the Oder-Spree canal, over four-fifths by weight and nearly three-fifths by value is carried by water.

These figures illustrate the tremendous importance of inland navigation in developing industry and in enlarging the export trade. Yet in the effort to extend water-routes to every part of the Empire Germany has been only one of a number of European countries, which are all striving to accomplish the same end. Some notion of this activity may be gained from the statement that since 1830 Belgium has spent in the neighborhood of five hundred million francs on its inland waterways. France, according to its programme of 1879, has already devoted thirteen hundred million francs toward the improvement of its rivers, canals and harbors; while Austria and Russia are likewise executing extensive improvements along this line.

In Germany, moreover, projects are under consideration, which, if carried out, will add greatly to the 5495 kilometers of artificial waterways existing in that country. The Prussian Canal Bill communicated to the Landtag in January, 1901, proposed an expenditure of nearly four hundred million marks. Besides providing for the opening of the whole region of Silesia by means of canals, and the canalization of a number of important rivers, this bill empowered the government to construct a Rhine-Weser-Elbe-canal, an Oder-Vistula canal and a large waterway between Berlin and Stettin. The Elbe and Oder being already connected, this bill contemplates a union of the five great rivers of Germany which flow into the North and Baltic seas. Among numerous other projects may be mentioned the proposed enlargement of the Danube-Main canal, and the plan of Austria to unite the Danube with the Elbe-Moldau and the Oder. If these plans are realized, it will mean not only a union of the five great rivers of Northern Germany with their numerous tributaries and branch canals, and a continuous waterway from end to end of the German Empire, but through the Rhine will also mean a union of these waterways with the Seine, the Saône and the Rhone. Moreover, the Danube will be connected through separate canals with the Rhine, the Elbe and the Oder, thus constituting an uninterrupted water-route from the North Sea to the Black Sea. The principal obstacle to the realization of these larger plans is the opposition of the Agrarian Party. But Germany is rapidly outgrowing its agricultural conditions, and there is every

reason to believe that an important form of State aid to commerce in the future, as in the past, will be the construction of canals and the canalization of rivers.

### *VI. Influence of Preferential Railway Rates.*

In the foregoing pages the discussion has been concerning the improvement of harbors and interior waterways. It now remains to discuss briefly the manner in which the State has endeavored to facilitate transportation by rail.

Owing to the central position of Germany in Europe, her ports and railways must necessarily compete with those of the surrounding nations. To meet this competition and to assist in developing home industry and the export trade, the railway management of Prussia has from time to time introduced numerous so-called preferential railway tariffs. In the main, these tariffs have also been adopted by the other German States, the various railway managements presenting in this respect a united policy in the interests of the whole nation. Compared with the rates of other leading European nations, these preferential tariffs are conspicuously low, and are applicable at present to no less than 63 per cent. of the total railway ton-mileage of the country.<sup>6</sup>

A detailed examination of these preferential rates shows that they operate to the advantage of the German North Sea harbors as opposed to the Dutch-Belgian ports, the Russian Black Sea harbors and the Austro-Hungarian ports on the Adriatic. Even at the expense of its own seaports, Prussia has granted preferential rates to Hamburg and Bremen in order to assist them in their competition with the harbors of Northwest and Southwest Europe. Thus, for example, to divert traffic away from the Dutch-Belgian ports preferential rates are granted in the trade between the German coast and the Rhine-Westphalian region on tobacco, cotton, fish, coffee, rice and a variety of other commodities, the rate being as low for the distance from Essen to Bremen as for the distance from Essen to Amsterdam.<sup>7</sup> Likewise, to counteract the influence of the harbors on the Adriatic and Black Seas, preferential rates are

<sup>6</sup>For a complete statement of all the preferential railway rates in force on the Prussian State lines in 1897, see the list prepared by Mr. W. S. H. Gastrell (*British Accounts and Papers for 1898*, vol. xcii, p. 54). For the most important additions to Mr. Gastrell's list of 1897, see the list prepared by Mr. Robert Collier (*British Diplomatic and Consular Reports*, No. 574, Miscellaneous Series, Feb., 1902. A Report on Prussian Railways).

<sup>7</sup>Wiedenfeld: "Die nordwesteuropäischen Welthäfen," p. 322.

accorded to cotton, tobacco, coffee, rice, hides, iron ore, petroleum and a large variety of articles which are forwarded via Germany to Austro-Hungary, Russia or Roumania.<sup>8</sup>

Other instances may be mentioned to show that where the interests of German industry or international trade make it desirable, the German railway managements have not refrained from granting preferential tariffs without regard to the nationality of the port. To illustrate, the Dutch-Belgian ports, though deriving a large share of their trade from the interior waterways of Germany, are also dependent for another large portion upon the railways of Germany. It is true that much of their trade is diverted to the North German coast; but on the other hand, they enjoy the benefits of special rates in the exportation of such commodities as coal, grain, iron and other minerals and the importation to Southern Germany and Switzerland of products like coffee, tea, cocoa, pepper and rice.<sup>9</sup>

One other important feature of the German system of railway rates remains to be noticed, namely, the so-called Levant and East African Traffic Tariffs. According to these tariffs, introduced respectively in 1890 and 1895, largely reduced rates are granted by the State railways to goods exported from the interior of the country to a large number of places in the Levant and East Africa, as well as to stations on the Oriental and East African railways. Aside from a reduction in the usual rates, these traffic tariffs also offer the advantage of sending goods on through bills of lading from the place of departure to the foreign point of destination. Summarized according to different classes of goods the reduction in freight afforded by this arrangement is as follows: "For the goods of Special Tariffs II and III only 1.5 to 1.7 pf. is charged instead of 3.5 and 2.2 to 2.6 pf., for the goods of Special Tariff I only 2.0 to 3.0 pf. instead of 4.5 pf., for all other goods in car-load lots only 3.0 to 3.4 pf., for piece goods only 3.5 to 4.5 pf. instead of 6 to 11 pf. per km".<sup>10</sup> In general the rates are about one-half as high as the ordinary rates and appear to be unusually low as compared with the tariffs of other European nations. The British Select Committee in its report on foreign ship subsidies for 1902 shows that the cost of transportation on the German railways, as concerns the Levant and East African tariffs, is only one-third to one-fifth as high for

<sup>8</sup>Wiedenfeld: "Die nordwesteuropäischen Welthaefen," p. 322.

<sup>9</sup>*Ibid.*

<sup>10</sup>*Ibid.*, p. 323.

a large number of commodities as the British rate and concludes that "these reduced rates have been and are fixed in accordance with the experience gained in Germany as regards the working cost per train-mile over long distances and that the primary object is the building up, promoting or increasing of German export trade to the countries in question and the enabling it to complete successfully with the trade of other foreign States to those countries."

*Summary of Results of Germany's Policy.*

From the foregoing review it must appear that State aid to commerce in Germany has been both liberal and general. It has manifested itself prominently in industrial and commercial education, in the development of the shipbuilding industry and the merchant marine, in the improvement of harbor channels and harbor facilities and in the construction of canals and the promotion of transportation by rail. Much of this assistance has been given by the States as distinguished from the Imperial Government. In the main, however, the several States have acted in harmony, and, as was seen in the case of Prussia, have not unduly emphasized local interests to the detriment of other parts of the Empire. Their funds have been expended judiciously and in a manner not at all prejudicial to national progress.

Viewed from the standpoint of material results, the paternal attitude of the Government towards commerce has been productive of wonderful results. Since 1872 the import and export trade of the country has increased by 72 per cent. and 100 per cent., respectively, and the exports of £233,890,000 in 1902 compare very favorably with the British exports of £277,552,000 for that year. Moreover, Germany has become a daring investor and promoter. Official estimates place her foreign investments at about five billion dollars, or a sum equal to half the foreign investments of Great Britain. The growth of her shipping has also been phenomenal. During the twenty years ending in 1900 Germany has increased the steam tonnage of her merchant marine elevenfold; while the total tonnage has increased nearly fivefold. From fourth place which she held in this respect in 1880, she has risen to second and has increased her portion of the world's entire merchant fleet since that date from 6.6 to nearly 10 per cent. Her shipbuilding industry has sprung into existence almost wholly since 1871 and has developed

so as not only to provide for the greater share of her own rapidly increasing demand for ships, but also to fill orders for other countries. In a word, the progress of Germany has taken place along all lines, in manufacturing, trade, shipping and shipbuilding. However important other factors may have been in bringing about this general advance, there can be no doubt that Germany furnishes an excellent example of the salutary influence which the State may exert in fostering those phases of commercial activity upon which the domestic prosperity and international prestige of a nation is principally dependent.

SOLOMON HUEBNER.